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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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EXAMINER'S REPORT

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ART UNIT	PAPER NUMBER
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DATE MAILED:

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

## Office Action Summary

Application No.

09/519 271

Applicant(s)

HENDERSON ET AL

Examiner

Shubo "Joe" Zhou

Art Unit

1631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_
- 2a) ☐ This action is **FINAL**                      2b) ☒ This action is non-final
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claims 1-31 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some \* c) ☐ None of the CERTIFIED copies of the priority documents have been:
- 1 ☐ received.
- 2 ☐ received in Application No. (Series Code / Serial Number) \_\_\_\_\_
- 3 ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

### Attachment(s)

- 15) ☐ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s): \_\_\_\_\_
- 18) ☐ Interview Summary (PTO-413) Paper No(s): \_\_\_\_\_
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other \_\_\_\_\_

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The art unit designated for this application has changed. Applicant(s) are hereby informed that future correspondence should be directed to Art Unit 1631.

### **Restriction/Election Requirement**

Restriction to one of the following inventions is required under 35 U.S.C. § 121:

I. Claims 1-18, drawn to methods for analyzing a nucleic acid sample, classified in Class 435, subclass 6. If this group is elected, then the below specie election is also required.

II. Claims 19-28, drawn to methods for locating the functional segments of a nucleic acid sample, classified in Class 435, subclass 5. If this group is elected, then the below specie election is also required.

III. Claims 29-31, drawn to methods for comparing DNA from two different sources, classified in Class 436, subclass 94.

Examination will be restricted to only the elected group.

The inventions are independent and/or distinct, each from the other because of the following reasons.

Each invention of Groups I-III is directed to a separate and distinct invention. Group I is directed to methods for analyzing a nucleic acid sample; Group II is directed to methods for locating the functional segments of a nucleic acid sample; and Group III is directed to methods for comparing DNA from two different sources. These methods are distinct both physically and functionally, require different process steps, reagents

and parameters, and produce different products. Consequently, these inventions have acquired a separate status in the art as a separate subject for inventive effect and are usually published separately. The search for each of the above inventions is not co-extensive particularly with regard to the literature search. Further, a reference which would anticipate the invention of any one Group would not necessarily anticipate or make obvious any of the other groups.

**Additional Specie election only regarding an election of Group I or II above**

It is noted that some claims in the instant application contain multiple species of inventions which require restriction/election.

Claim 7 of Group I is directed to a method analyzing a nucleic acid sample, said method having limitation selected from one or more of the group comprising of (1) peptide including restriction endonuclease, transcription factor, or a peptide (2) nucleotide including a modified nucleotide or a nucleotide, (3) a small molecule conjugated to a microparticle or a nanoparticle. This group of sequence-specific tags are considered as species subject matter. They belong to distinct chemical groups and are usually published separately and require different searches. Applicant is required to elect only one species for the claimed invention of Claim 7 in Group I, from the group of 3 species listed above, designated as, by the Examiner. Species 7-1 (peptide), 7-2 (nucleotide) and 7-3 (small molecule) for the purpose of examination.

Similarly, claim 16 of Group I is directed to a method analyzing a nucleic acid sample, said method having limitation selected from a group of functional groups including (1) biotin-avidin complexes, (2) primary amines, (3) sulfhydryl groups, (4) single stranded binding proteins, and (5) histidine terminated oligonucleotides. For the same reasons stated above, applicant is required to elect only one species for the

claimed invention of claim 16 in Group I. from the group of species listed above, designated as, by the Examiner Species, 16-1 (biotin-avidin) through Species 16-5 (histidine terminated oligonucleotides) for the purpose of examination.

Identically, claim 26 of Group II has limitation selected from the same group. Applicant is required to elect only one species for the claimed invention of claim 26 in Group II, from the group of species designated as, by the Examiner, Species 26-1 (biotin-avidin) through Species 26-5 (histidine terminated oligonucleotides) for the purpose of examination.

Because these inventions are independent and/or distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

Applicant is advised that the response to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR § 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 C.F.R. § 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 C.F.R. § 1.48(b) and by the fee required under 37 C.F.R. § 1.17(h).

Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the PTO

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Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993)(See 37 CFR § 1.6(d)). The CM1 Fax Center number is either (703) 308-4242 or (703)305-3014.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to:

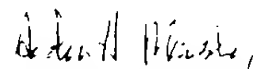
Shubo "Joe" Zhou, Ph.D., whose telephone number is (703) 605-1158. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, can be reached on (703) 308-4028.

Any inquiry of a general nature or relating to the status of this application should be directed to Patent Analyst Tina Plunkett whose telephone number is (703)-305-3524, or to the Technical Center receptionist whose telephone number is (703) 308-0196.

S. "Joe" Zhou: sjz

January 2, 2001

  
ARDIN H. MARSCHEL  
PRIMARY EXAMINER